

03/01/01



OPIE

CRF Problem Report

The Scientific and Technical Information Center (STIC) experienced a problem when processing the following computer readable form (CRF):

Application Serial Number: 091780,014
Filing Date: 02/09/2001
Date Processed by STIC: 4/7/03

STIC Contact: Mark Spencer, 703-308-4212

Nature of Problem:

The CRF (was):

- Damaged or Unreadable (for Unreadable, see attached)
 Blank (no files on CRF) (see attached)
 Empty file (filename present, but no bytes in file) (see attached)
 Virus-infected. Virus name: _____ The STIC will not process the CRF.
 Not saved in ASCII text
 Sequence Listing was embedded in the file. According to Sequence Rules,
submitted file should **only** be the Sequence Listing.
 Did not contain a Sequence Listing. (see attached sample)
 Other:

PLEASE USE THE CHECKER VERSION 4.0 PROGRAM TO REDUCE ERRORS.
SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
EFFECTIVE MAY 1, 2003 (via USPS): Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service , or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

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N.B.: If PatentIn software was used, please contact Robert Wat
for assistance at 703-308-4216 or 703-308-4212.

wide variety of different sizes and different mixtures of the above-mentioned constituents dependent on the status of remodeling during the metabolic RCT cascade.

- The key enzyme involved in the RCT pathway is LCAT.
- 5 LCAT is produced mainly in the liver and circulates in plasma associated with the HDL fraction. Cholestryl ester transfer protein (CETP) and another lipid transfer protein, phospholipid transfer protein (PLTP) contribute to further remodeling the circulating HDL population. CETP can move
- 10 cholestryl esters made by LCAT to other lipoproteins, particularly ApoB-containing lipoproteins, such as VLDL. HDL triglycerides can be catabolized by the extracellular hepatic triglyceride lipase, and lipoprotein cholesterol is removed by the liver via several mechanisms.
- 15 Each HDL particle contains at least one copy (and usually two to four copies) of ApoA-I. ApoA-I is synthesized by the liver and small intestine as preproapolipoprotein which is secreted as a proprotein that is rapidly cleaved to generate a mature polypeptide having 243 amino acid residues.
- 20 ApoA-I consists mainly of 6 to 8 different 22 amino acid repeats spaced by a linker moiety which is often proline, and in some cases consist of a stretch made up of several residues. ApoA-I forms three types of stable structures with lipids: small, lipid-poor complexes referred to as pre-beta-
- 25 1 HDL; flattened discoidal particles containing only polar lipids (phospholipid and cholesterol) referred to as pre-beta-2 HDL; and spherical particles containing both polar and nonpolar lipids, referred to as spherical or mature HDL (HDL₁ and HDL₂). Most HDL in the circulating population contain
- 30 both ApoA-I and ApoA-II (the second major HDL protein) and are referred to herein as the AI/AII-HDL fraction of HDL. However, the fraction of HDL containing only ApoA-I (referred to herein as the AI-HDL fraction) appear to be more effective in RCT. Certain epidemiologic studies support the hypothesis
- 35 that the AI-HDL fraction is antiartherogenic. (Parra et al., 1992, Arterioscler. Thromb. 12:701-707; Decossin et al., 1997, Eur. J. Clin. Invest. 27:299-307)